Ontario

Ministry of Natural Resources

Hon. Alan W. Pope
Minister

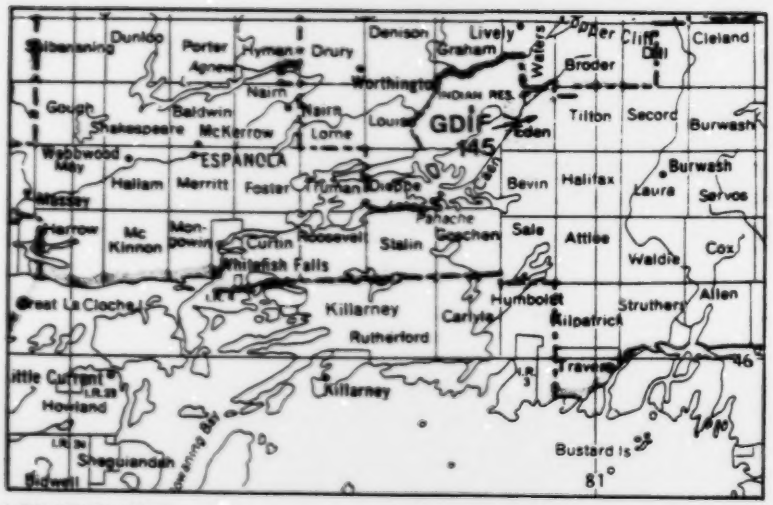
John R. Sloan
Deputy Minister

ONTARIO GEOLOGICAL SURVEY
GEOLOGICAL DATA INVENTORY FOLIO
GDIF 145

EDEN TOWNSHIP

DISTRICT OF SUDBURY

Compiled by the Staff of
the Resident Geologist's Office,
Sudbury



LOCATION MAP

Scale 1:1 013 760 or 1 inch to 16 miles

85-1183/

NTS Number 41 I/6

Mining Claim Map Number M777

This project was funded by the Ontario Ministry of Northern Affairs through the Northern Ontario Geological Survey (NOGS) Program.

STATEMENT. This inventory is unedited. Discrepancies may occur for which the Ontario Geological Survey does not assume liability. Information from this source may be quoted if credit is given. Reference to this inventory should be made as follows:

Ontario Geological Survey
1984: Eden Township, Sudbury District; Ontario Geological Survey, Geological Data Inventory Folio 145, compiled by the staff of the Resident Geologist's office, Sudbury, 24p. and 2 maps.

Compilation by: Adlington, Richard, Jan.9, 1984.

	Page Revised	Revised by

Date	Page Revised	Revised by

EDEN TOWNSHIP

TABLE OF CONTENTS

Data Sources Checklist 1
Metals and Minerals Reference List 2
Mineral Occurrences 3
Type of Work 4
Drill Hole Summary 6
Airborne Geophysical Survey Data 8
Geochemical Survey Data 9
Miscellaneous Data 10
Newspaper Clipping File 11
ODM General Index Search 12
Selected References 16
Notes and Addenda 24

ACCOMPANYING MAPS

Property Location Map – 1 map
Exploration Data Map – 1 map
Map Scale 1: 31 680 or 1 inch to ½ mile

EDEN TOWNSHIP

CONVERSION FACTORS FOR MEASUREMENTS IN ONTARIO GEOLOGICAL SURVEY PUBLICATIONS

If the reader wishes to convert imperial units to SI (metric) units or SI units to imperial units the following multipliers should be used:

CONVERSION FROM SI TO IMPERIAL			CONVERSION FROM IMPERIAL TO SI		
SI Unit	*Multiplied by*	*Gives*	*Imperial Unit*	*Multiplied by*	*Gives*
			LENGTH		
1 mm	0.039 37	inches	1 inch	**25.4**	mm
1 cm	0.393 70	inches	1 inch	**2.54**	cm
1 m	3.280 84	feet	1 foot	**0.304 8**	m
1 m	0.049 709 7	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
			AREA		
1 cm^2	0.155 0	square inches	1 square inch	**6.451 6**	cm^2
1 m^2	10.763 9	square feet	1 square foot	**0.092 903 04**	m^2
1 km^2	0.386 10	square miles	1 square mile	2.589 988	km^2
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
			VOLUME		
1 cm^3	0.061 02	cubic inches	1 cubic inch	**16.387 064**	cm^3
1 m^3	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m^3
1 m^3	1.308 0	cubic yards	1 cubic yard	0.764 555	m^3
			CAPACITY		
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	**4.546 090**	L
			MASS		
1 g	0.035 273 96	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 75	ounces (troy)	1 ounce (troy)	**31.103 476 8**	g
1 kg	2.204 62	pounds (avdp)	1 pound (avdp)	**0.453 592 37**	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311	tons (short)	1 ton (short)	**0.907 184 74**	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	**1016.046 908 8**	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	**1.016 046 908 8**	t
			CONCENTRATION		
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

1 ounce (troy)/ton (short)	20.0	pennyweights/ton (short)
1 pennyweight/ton (short)	0.05	ounce (troy)/ton (short)

One gram(g) per tonne is equivalent to one part per million (1 ppm).

NOTE–Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries published by The Mining Association of Canada in co-operation with the Coal Association of Canada.

DATA SOURCES CHECK LIST

The following sources have been to compile the data for this area. ference data was found the appropriate arked 'no'; if reference data was found, is marked 'yes'.

All reference data found are included in the following pages. If the box is blank, the data source has not yet been searched. If the box is marked N.A., the source item is Not Applicable to this area and therefore not searched.

SOURCES OF DATA	Data	Initial
esident Geologist's Office Files	Yes	R.A.
ssessment Files Research Office, Toronto	N.A.	R.A.
DM General Index; 7 volumes	Yes	R.A.
atalogue of Airborne Geophysical Surveys (ODM)	No	R.A.
DM Mineral Resources Circulars and OGS Mineral Deposits Circulars	Yes	R.A.
DM Industrial Mineral Reports	No	R.A.
ibliography of Post Precambrian Theses - Karrow (ODM MP 1)	No	R.A.
ibliography of Precambrian Theses - Ginn (ODM MP 2)	Yes	R.A.
lewspaper Clippings File	Yes	R.A.
SC Index to Publications	Yes	R.A.
GS Index to Published Maps and Reports - MP 77 and Supplements to MP 77	Yes	R.A.
GS Index Maps	Yes	R.A.
ource Mineral Deposit Records (O.G.S.) Mineral Occurrences File	Yes	R.A.
Author - Subject Articles File	Yes	R.A.
Miscellaneous Papers: ODM & OGS	Yes	R.A.
DM Geological Circulars: OGS Study Series , Reports	Yes	R.A.
DM Preliminary Reports: ODM Bulletins	No	R.A.
DM – OGS Open File Reports	Yes	R.A.
GS Northern Ontario Engineering Geology Terrain Studies	Yes	R.A.
GS Aggregate Resources Inventory Papers	No	R.A.
GS Mineral Potential Maps	Yes	R.A.
Theses on File, Sudbury	Yes	R.A.
Aerial Photographs on File, Sudbury	Yes	R.A.

METALS AND MINERALS REFERENCES LIST

- △ anh. . . . . .Anhydrite
- △ ank. . . . . .Ankerite
- △ anna . . . . . Annabergite
- △ ap. . . . . .Apatite
- △ arg . . . . . Argentite
- △ As . . . . . .Arsenic
- ▲ asp . . . . . .Arsenopyrite
- △ asb . . . . . .Asbestos
- △ ba. . . . . .Barite
- △ be. . . . . .Beryl
- △ Bi. . . . . .Bismuth
- △ bn . . . . . .Bornite
- △ bran . . . . . .Brannerite
- △ bruc . . . . . .Brucite
- △ Cd . . . . . Cadmium
- △ calc. . . . . Calcite
- △ carb . . . . . .Carbonate
- △ cel . . . . . .Celestite
- △ cc. . . . . .Chalcocite
- ▲ cp. . . . . .Chalcopyrite
- △ ch. . . . . .Chert
- △ clay . . . . . .Clay
- △ Co . . . . . Cobalt
- △ cob. . . . . Cobaltite
- △ cb. . . . . .Columbite
- △ Cu . . . . . .Copper
- △ cor . . . . . Corundum
- △ dol . . . . . Dolomite
- △ ep. . . . . Epidote
- △ ery . . . . . Erythrite
- △ fel . . . . . .Feldspar
- △ fl . . . . . .Fluorite (flurospar)
- △ fu. . . . . .Fuchsite
- △ gn. . . . . .Galena
- △ gt . . . . . .Garnet
- △ goe . . . . . .Goethite
- ▲ Au . . . . . Gold
- △ gf . . . . . .Graphite
- △ gl . . . . . Gravel
- △ gyp. . . . . .Gypsum
- △ hem . . . . . Hematite
- △ il . . . . . .Ilmenite
- △ Fe . . . . . .Iron
- △ IF. . . . . Iron Formation
- △ jas . . . . . Jasper
- △ kaol . . . . . .Kaolinite (kaolin)
- △ ky . . . . . Kyanite
- △ Pb . . . . . Lead
- △ lim . . . . . Limonite
- △ Li. . . . . Lithium
- △ mgst . . . . . .Magnesite
- △ mag . . . . . .Magnetite
- △ mc . . . . . .Malachite
- △ Mn . . . . . Manganese
- △ mb . . . . . .Marble
- △ mar. . . . . Marcasite
- △ ma . . . . . .Marl
- △ mi . . . . . Mica
- △ ml . . . . . .Millerite
- △ mo . . . . . .Molybdenite
- △ Mo . . . . . .Molybdenum
- △ mon . . . . . Monazite
- △ ne. . . . . Nephelite (nepheline)
- △ nc. . . . . .Niccolite
- △ Ni. . . . . Nickel
- △ Nb . . . . . .Niobium
- △ Pd . . . . . .Palladium
- △ peat . . . . . .Peat
- △ pent . . . . . .Pentlandite
- △ Pt. . . . . .Platinum
- ▲ py . . . . . .Pyrite
- △ pyl . . . . . Pyrochlore
- △ pyrl . . . . . .Pyrolusite
- ▲ po . . . . . .Pyrrhotite
- △ q . . . . . Quartz
- △ qcv. . . . .Quartz carbonate vein
- △ ra. . . . . .Radioactive minerals
- △ RE . . . . . .Rare Earths
- △ sd. . . . . Sand
- △ sgl . . . . . Sand and gravel
- △ ss . . . . . .Sandstone
- △ scap . . . . . Scapolite
- △ shee . . . . . .Scheelite
- △ serp . . . . . Serpentine
- △ sh. . . . . .Shale
- △ sid . . . . . Siderite
- △ si . . . . . .Silica
- △ Ag . . . . . .Silver
- △ sl . . . . . Slate
- △ sm . . . . . .Smaltite
- △ sod. . . . . .Sodalite
- △ spec . . . . . Specularite
- △ sp. . . . . .Sphalerite
- △ spd. . . . . .Spodumene
- △ staur. . . . . .Staurolite
- △ stib. . . . . Stibnite
- △ st . . . . . .Stone
- △ talc. . . . . .Talc
- △ Te . . . . . .Tellurium
- △ td. . . . . Tetrahedrite
- △ th. . . . . .Thorite
- △ Th . . . . . .Thorium
- △ thuc . . . . . Thucholite
- △ ti . . . . . Titanite
- △ Ti. . . . . Titanium
- △ tour . . . . . .Tourmaline
- △ trap . . . . . Trap rock
- △ W. . . . . Tungsten
- △ uran . . . . . Uraninite
- △ U . . . . . .Uranium
- △ verm . . . . . .Vermiculite
- △ Y . . . . . Yttrium
- △ Zn . . . . . .Zinc
- △ zr. . . . . Zircon

Solid triangles indicate metal and mineral occurrences shown on the accompanying maps.

EDEN TOWNSHIP

MINERAL OCCURRENCES

Map Ref. Letter	Name(s)	Mineralization	Source Mineral Deposit Record	References in OGS Mineral Deposits Circulars & OGS Industrial Mineral Reports	Additional References and/or Remarks
A	Long Lake Gold Mine	po,asp,Au	Au 6	MDC18, pp.61,62	O.D.M. AR48, pt.10, pp.25-27
B	Dupont Can. Expl.	po,cp,py	-	-	Eden File 19-A1

GDIF FORM NO. 1

EDEN TOWNSHIP 4

TYPE OF WORK		Numbers below represent the year in which the work was done; e.g., 68 for 1968.																		
EXPLORATION DATA filed at the RESIDENT GEOLOGIST'S OFFICE SUDBURY		GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND WORK	PROSPECTUS, NOTES, CORRESPONDENCE	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETIC	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETER	GROUND ELECTROMAGNETIC	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY	PRODUCTION	SHAFT SINKING	FEASIBILITY STUDY
COMPANY/AUTHOR (file number)																				
1	Dupont of Canada Exploration Ltd. (Luke Lake Mines Ltd.)	81 82	81		82	82						81	81		81[1]					
2	Long Lake Gold Mine (Norsco Holdings Ltd., Haultain Resources Ltd., Hartland Mines Ltd., Copper-Man Mines Ltd., Lebel Oro Mines Ltd., Downey, R., Canadian Exploration Co. Ltd.)	72[2]			16 35 -39 73	73[3] 83[4]	09 -16 31 33[9] -35 36 -39	72				72[2]	72[2]					10 11 13 -16 31 37 -39	09[5] -13 15[7] -16 36[6]	72[8] -73 81[8] -83
3	Staple Mining Co. Ltd.												74							
	[1] I.P. Chargeability & Resistivity Anomalies [2] No Data [3] Northern Miner, Nov.1,1973 [4] George Cross News Letter, No.133, July 12, 1983																			

GDIF FORM NO. 7

filed at the
RESIDENT GEOLOGIST'S OFFICE
SUDBURY

COMPANY/AUTHOR (file number)	GEOLOGICAL	GEOCHEMICAL	TRENCHING, STRIPPING	DRILLING	ASSAY DATA	UNDERGROUND	PROSPECTUS, NO CORRESPONDENC	AIRBORNE MAGNETOMETEF	AIRBORNE ELECTROMAGNE	AIRBORNE RADIOMETRIC	GROUND MAGNETOMETEF	GROUND ELECTROMAGNE	GROUND RADIOMETRIC	INDUCED POLARIZATON	SELF POTENTIAL	RESISTIVITY			
5 No.1 Shaft, Vertical, 225' 6 No.2 Shaft, Vertical, 207' 7 Winze from 180' L to 345'L 8 On Au Recovery From Tailings																			

GDIF FORM NO. 2

TOWNSHIP

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth Degrees	Initial Dip of Hole Degrees	Thickness of Overburden Feet	Total Length of Hole Feet	Mineralization Noted in Log	Assay Data Included for
1	Dupont Canada Exploration	ED-82-3	1982	145	45	8	300	py,po	Au
2		ED-82-4	1982	305	46	4	399	py,po	Au
3		?	1982	No	Data				
3a		?	1982	No	Data				
3b		?	1982	No	Data				
4	Long Lake Gold Mine	?	?	N35W?	No Data				
5		?	?	N35W?	No Data				
5a		?	?	N35W?	No Data				
6		?	?	N14W	45	No Data			
6a		?	?	N73W	40	No Data			
7	Canadian Exploration Co.	?	1916	No	Data				
7a	Lebel Oro Mine	?	1935,36	No	Data				
8	Lebel Oro Mines	?	1935-39	No	Data				
9	Hartland Mines	6 Holes	1973	No	Data			Au	Au-Northern Miner, Nov.1/73

GDIF FORM NO. 3

EDEN TOWNSHIP

DRILLHOLE SUMMARY

Map Drilling Location Number	Company Name	Company Drillhole Number	Date Drilled	Bearing Azimuth	Initial Dip of Hole	Thickness of Overburden	Total Length of Hole	Mineralization Noted in Log	Assay Data Included for

GDF FORM NO. 1

EDEN TOWNSHIP

AIRBORNE GEOPHYSICAL SURVEY DATA

No.	By For	Type of Survey	Flight Altitude	Flight Line Direction	Flight Line Spacing

GDIT FORM NO. 4

EDEN TOWNSHIP

GEOCHEMICAL SURVEY DATA

Map Sample Site Reference Number	Type of Survey	Analysis For	By	Reference
1	Geochemical, 78 claims	Au	Dupont Can. Expl.	Eden File 19-A1
2	Geochemical	Au, Ni, Cu	Dupont Can. Expl.	Sample Nos.2663B-2669B
3	Geochemical	Au	Dupont Can. Expl.	Sample Nos.9550B,9551B, 9554B,9557B,9578B

MISCELLANEOUS DATA

AGE DATING

Site	Method	Material	Reference	Result

NEWSPAPER CLIPPINGS FILE

NOTE: A file of newspaper clippings about the companies listed below, who have worked in this area, is maintained in the Regional/Resident Geologist's Office.

SUDBURY

Copper-Man Mines Ltd., Hartland Mines, Ltd.

Northern Miner: June 21, 1972
July 13, 1972
Nov.1, 1973
June 10, 1974
Sept.26, 1974

Haultain Resources Ltd.

George Cross News Letter No.133, p.3, July 12, 1983.

ODM GENERAL INDEX SEARCH

Words searched: CANADIAN EXPLORATION CO.
COPPER MAN MINES
DOWNEY, R.
EDEN TP. (TP.69)
LEBEL ORO MINES
LONG LAKE GOLD MINE

Index Volume	Listing:	Report Volume	Part	Page
1	CANADIAN EXPLORATION CO.			
	Accidents at mine of	23	1	74,84
	Capital and date of license	18	1	45
	Plant enlarged	22	1	106
		23	1	112
	notes on	23	1	219
	photo of	23	1	122
	size of	23	1	10
	Producing	21	1	9
		23	1	6
		24	1	8,9
		25	1	7,8,9
	Water power for	21	1	106
		22	1	12,101
	Work by	19	1	83
		20	1	9,107
		21	1	112
		22	1	122
		24	1	103
		25	1	78
	See also Long Lake gold m.			
2	CANADIAN EXPLORATION CO.			
	See also Long Lake gold m.			
	Long Lake g.m. worked by	26	1	89,157
		27	1	8
		30	2	18
3	CANADIAN EXPLORATION CO.			
	Operating Long Lake g.m.	43	1	86
5	COPPER-MAN Mines, Ltd.			
	Change of name (Lebel Oro)	62	1	60
3	DOWNEY, R.			
	Gold production, Long Lake g.m.	42	1	9
4	DOWNEY, R.			
	Gold production, Long Lake g.m.	58	1	20
3	EDEN TP., Sud. (TP.69)			
	Gold mg. See Long Lake g.m.			
4	EDEN TP. Sud.			
	Gold mg. See Long Lake g.m.			

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched:

LEBEL ORO MINES

Index Volume	Listing:	Report Volume	Part	Page
5	EDEN TP., Sud.			
	Gold mg. See Lebel Oro g.m.			
3	LEBEL ORO MINES LTD.			
	See also Lebel Oro g.m.			
	Long Lake g.m.			
	Capital; officers; operations:			
	(1933)	43	1	86
	(1934)	44	1	114
	(1935)	45	1	127
	(1936)	46	1	162
	(1937)	47	1	153
	(1938)	48	1	141
	(1939)	49	1	150
3	LEBEL ORO GOLD MINE, Eden tp.			
	See Long Lake g.m.			
4	LEBEL ORO MINES, LTD.			
	Long Lake g.m. acquired by	58	1	20
	Name changed	59	1	46
5	LEBEL ORO GOLD MINE, EDEN TP.			
	Production statistics	64	1	18
1	LONG LAKE GOLD MINE, S. of Waters tp.			
	Mill enlarged	22	1	106
	Notes	23	1	219
	Photo	23	1	218
	Producing	24	1	8
	Rocks	25	1	9
	Work at (1911)	23	1	214,215
	(1914)	21	1	112
	(1915)	24	1	103
	(1916)	25	1	78
2	LONG LAKE, S. of, and in, Waters tp.			
	Area:	26		157
	Gold: See Long Lake g.m.			
2	LONG LAKE GOLD MINE, Long Lake, S of Waters tp. (WD601-2)			
	Closed down (1916)	26		10
		27	1	8

ODM GENERAL INDEX SEARCH

Words searched:

Index Volume	Listing:		Report Volume	Part	Page
	Description		30	2	18
	Fault		26		162
	Geology of vicinity, plan Facing		26		157
	Map, coloured. In pocket.		26		
	Orebody, boring for		26		89
	description		30	1	106
	origin		30	2	8
	Producing		30	2	4
	Producing (1916)		26		11
	Report by Baker		26		157-162
	Rocks		26		159,160
	Shaft, depth		30	2	12
	Vein, type of		30	2	9,11
	Water power for		N.C.		R222
			30	2	12
3	LONG LAKE GOLD MINE, Eden tp.				
	Accident rate (1937)		47	1	256
	(1938)		48	1	245
	Acquired by Lebel Oro Mines		43	1	86
	Mill, arsenic poisoning in		47	1	259
	capacity		49	1	25
	constructed		45	1	127
	Operated by R. Downey		42	1	9
	Operations (1933-1939)				
	See Lebel Oro Mines				
	Report & sketch maps		48	10	25-27
4	LONG LAKE GOLD MINE, Eden tp.				
	Acquired by Lebel Oro Mines		58	1	20
	Production	Table	59	1	IV
5	LONG LAKE GOLD MINE, Eden tp.				
	Production statistics	Table	61	1	IV

GDIF FORM NO. 8

ODM GENERAL INDEX SEARCH

Words searched

Index Volume	Listing:	Report Volume	Part	Page

EDEN TOWNSHIP

GDIF FORM NO. 8

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		REGIONAL GEOLOGICAL COMPILATION MAPS		
Card, K. D.	1971	Panache Lake Area, East Part	O.D.M. Map P.669	1"=1 mile
	1978	Sudbury-Manitoulin Area	O.G.S. Map 2360	1"=2 miles
Card, K. D., & Lumbers, S. B.	1974,75	Sudbury-Cobalt	O.G.S. Map 2361	1"=4 miles
Thomson, J. E.	1961,68	Espanola Sheet	O.D.M. Map P.105	1"=2 miles
		GEOPHYSICAL MAPS		
Ayers, L. D., Lumbers, S. B., Milne, V. G. Robeson, D. W., Card, K. D.	1971	O.G.S. Aeromagnetic Compilation Map, East Central Sheet	OFR 5327	1"=16 miles
G.S.C.-O.D.M.	1965	Aeromagnetic Map, Sudbury, Ontario	Map 7067G	1"=4 miles
G.S.C.-O.D.M.	1965	Aeromagnetic Map, Copper Cliff, Ontario	Map 1517G	1"=1 mile
Gupta, V. K.	1981	Bouguer Gravity and Generalized Geological Map of the Sudbury and Onaping Lake, Districts of Sudbury and Algoma	Map P.2482	1"=16 miles
O.D.M.	1958	Aeromagnetic Map, Township of Eden	A109 (Sudbury File No.)	1"=¼ mile
O.G.S.	1976	Uranium Reconnaissance Program Airborne Gamma Ray Spectrometer Survey. Geophysical Series.	Map P.1610	1:250,000

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
		SURFICIAL, PLEISTOCENE, TERRAIN ENGINEERING		
Dept. of Energy, Mines and Resources, Surveys and Mapping Branch	1975	Topographic Map, Copper Cliff, Ontario	41 I/6	1:50,000
Gartner, J. F.	1980	N.O.E.G.T.S. Study 99, Espanola Area		
	1978	Data Base Map	5002	1:100,000
		MINERAL POTENTIAL MAPS		
Springer, J. S.	1978	Ontario Mineral Potential, Southern Part of the Central Sheet. Districts of Algoma and Manitoulin.	O.G.S. Map 1511	1:250,000
		GEOCHEMICAL		
		No Data Available. Jan.9, 1984		
		GEOLOGICAL REPORTS AND MAPS		
Baker, M. B.	1917	Long Lake Gold Mine	AR26, pt.1 O.D.M.	pp.157-162
Card, K. D.	1975	Geology of Panache Lake Area, Districts of Sudbury and Manitoulin	O.D.M. OFR 5123	
	1978	Geology of the Sudbury-Manitoulin Area, Districts of Sudbury and Manitoulin	GR166 O.G.S. Map 2360	1"=2 miles
Card, K. D., Innes, D. G. and Debicki, R. L.	1974	Stratigraphy, Sedimentology, Huronian Supergroup of Sudbury-Espanola Area	OFR 5107	

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Card, K. D., Palonen, P. Siemiatkowska, K.	1970	Eden Township and parts of Bevin and Caen	O.D.M. Map P.612	1"=¼ mile
	1975	Louise-Eden Area	O.D.M. Map 2299	1"=¼ mile
	1979	Geology of the Louise-Eden Area	O.D.M. GR124	
Collins, W. H.	1979	North Shore of Lake Huron	G.S.C. Sum. Rept. Pt.E	
Cooke, H. C., Johnston, W. A.	1932	Gold Occurrences in Canada, Summary Account	G.S.C., Econ.Geol. Series No.10	p.29
Cooke, H. C.	1946	Canadian Lode Gold Areas	G.S.C. Econ.Geol. Series No.15	p.68
Hurst, M. E.	1927	Arsenic-Bearing Deposits in Canada	G.S.C. Economic Geol. Series No.4	p.112
Kindle, E. D.	1936	Gold Occurrences of Ontario East of Lake Superior	G.S.C. Mem.192	pp.94,95
Mines Branch, Ottawa	1923	Investigations in Ore Dressing and Metallurgy	Rept.617	pp.87-89 (No.202)
	1926	Ibid	Rept.688	pp.53-57 (No.252)
	1936	Ibid	Rept.774	pp.145-154 (No.681)
Phemister, T. C.	1939	Notes on Several Properties in the District of Sudbury. Lebel Ore Mines.	O.D.M. AR48,pt.10	pp.25-27
Moore, E. S.	1929	Ore Deposits Near The North Shore of Lake Huron	O.D.M. AR38, pt.7	

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
O.G.S. & Mineral Resources Branch	1982	Mineral Potential Map of Ontario Southern Sheet Magnetic Compilation Map Geological Compilation Map 2197	OFR5328	1"=16 miles 1"=16 miles 1"=16 miles 1"=16 miles
Quirke, T. T., Collins, W. H.	1930	The Disappearance of the Huronian	G.S.C. Memoir 160 Map 220A	1"=1 mile
Royal Ont. Nickel Commission	1917	Report and Appendix		p.R222
Vos, M. A., Smith, B. A., Stevenato, R. J.	1981	Industrial Minerals of the Sudbury Area	OFR5329	
Yundt, S. E., et al	1983	Industrial Minerals of Ontario	O.G.S. Map P.2591	1:50,000
		JOURNAL ARTICLES, THESES, TECHNICAL REPORTS		
Casshyap, S. M.	1966	Sedimentary Petrology and Stratigraphy of the Huronian Rocks South of Espanola, Ont. Ph.D., Western	Sudbury Theses File No.2	
Cooke, H. R. H.	1951	Sulphide Deposits West of Sudbury. B.Sc. Queen's	MP2	p.15
Dalziel, I. W., Brown, J. M. and Warren, T. E.	1969	The Structural and Metamorphic History of the Rocks Adjacent to the Grenville Fornt near Sudbury, Ontario and Mount Wright, Quebec	G.A.C. Special Paper #5	p.207-224
Debicki, R. L.	1982	Killarney Provincial Park Area, Ontario	O.G.S. Guidebook #6	
Eade, K. E.	1950	The Huronian Rocks of Northwestern Ontario M.Sc., McG.	MP2	p.34

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Freeman, B. C.	1932	The Long Lake Diorite and Associated Rocks, Sudbury District, Ontario. Ph.D., UC	MP2	p.19
Ginn, R. M.	1960	The Relationship of the Bruce Series to the Granites of the Bruce Series to the Granites in the Espanola Area. Ph.D., UT.	MP2	p.20
Henderson, J. R.	1967	The Grenville Front Southwest of Sudbury, Ont. Ph.D., McM.	Sudbury Theses File, No.27	
Jones, W. A.	1930	1) Petrography of the rocks in the vicinity of Killarney, Ontario. and 2) Killarney gneisses and xenoliths at Sudbury; Ph.D., UT.	MP2	p.27
Krogh, T. E., Davis, G. L.	1969	Old Isotopic Ages in the Northwestern Grenville Province, Ontario	G.A.C. Special Paper #5	p.189-192
LaTour, T. E.	1981	Significance of Folds and Mylonites at the Grenville Front in Ontario: Summary	Geol. Soc. An. Bull.92 (1)	p.411-413
Laurin, Andre	1955	The Problem of the boundary between Grenville and Keewatin-Timiskaming provinces, Ontario; D.Sc., Laval.	MP2	p.29
Lindsay, D. A.	1967	The Sedimentology of the Huronian Gowganda Formation, (With Special Reference to Whitefish Falls Area). Ph.D., Johns Hopkins	Sudbury Theses File No.16	
Lindsay, D. A.	1969	Glacial Sedimentology of the Precambrian Gowganda Formation, Ontario, Canada	Geol. Soc. Am. Bull.80	pp.1685-1702

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Long, D. G. F.	1978	Depositional Environments of a thick Proterozoic sandstone; the (Huronian) Mississagi Formation of Ontario, Canada.	Can. J. Earth Sci., Vol.15	pp.190-206
McLennan, S. M., Fryer, B. J. Young, G. M.	1979	The geo-chemistry of the carbonate-rich Espanola Formation (Huronian) with emphasis on rare earth elements	Can. J. Earth Sci., Vol.15	pp.230-239
Palonen, P. A.	1971	Stratigraphy and Deformational Environment of the Mississagi Fm., Ont. M.Sc., Calgary	Sudbury Theses File No.18	
Quirke, T. T.	1915	Geology of Espanola District, Ontario. Ph.D., UC.	MP2	p.38
Schenk, P. E.	1965	Depositional Environment of the Gowganda Formation (Precambrian) at the south end of Lake Timagami, Ontario	J. Sed. Pet., Vol.135	pp.309-318
Siemiatkowska, K. M.	1970	Bibliography of Huronian Geology Covering the Region from Sault Ste. Marie to the Grenville Front.	Sudbury Theses File	
Spaven, H. R.	1966	Granite Tectonics in Part of Eden Tp., Sudbury District, Ont., M.Sc., McM.	Sudbury Theses File No.26	
Thachuk, N. M.	1960	The Origin of the Gowganda Banded Argillite. B.A.Sc., U.T.	MP2	p.44
Wright, J. D.	1935	The Age of Some Granite Batholiths North of Lake Huron and the Genetic Relations of the Arsenical Gold Ores to the Keweenawan Granites. Ph.D., UT.	MP2	p.48
Young, G. M.	1973	Origin of the carbonate-rich Early Proterozoic Espanola Formation, Ontario, Canada	Geol. Soc. Am. Bull., Vol.84	p.135-160

GDIF FORM NO.9

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages
Young, G. M.	1981	The Early Proterozoic Gowganda Formation, Ontario Canada	Earth's Pre-Pleistocene Glacial Record. Cambridge U. Press	pp.807-812

GDIF FORM NO.9

EDEN TOWNSHIP

SELECTED REFERENCES

Author	Date	Title	Reference	Map Scales and/or Report Pages

GDIF FORM NO. 9

NOTES AND ADDENDA

Aerial Photographs Index

Sudbury File

Scale 1" = ¼ mile

Year	Roll	Line	Numbers
1959	12	4614	165-170
	59	4613	70-72
	58	4612	113-115
1946	17	162	47-53
	17	163	45-48
	16	163	7-9
	15	164	47-52
	14	165	22-27

Long Lake Gold Mine

The location of No.2 shaft is uncertain. Phemister describes it as being "just southwest of the open pit".

EDEN TOWNSHIP

MAPS NOT

FILMED

CARTES

OMISES